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Journal Item

How to cite:

Barnes, Amy Jane; Charnley, Kim; Dohmen, Renate and Lotz, Nicole (2020). Colonial histories, museum collections, FabLabs and community engagement: flows of practices, cultures and people – a roundtable. Open Arts Journal, 9 pp. 91–118.

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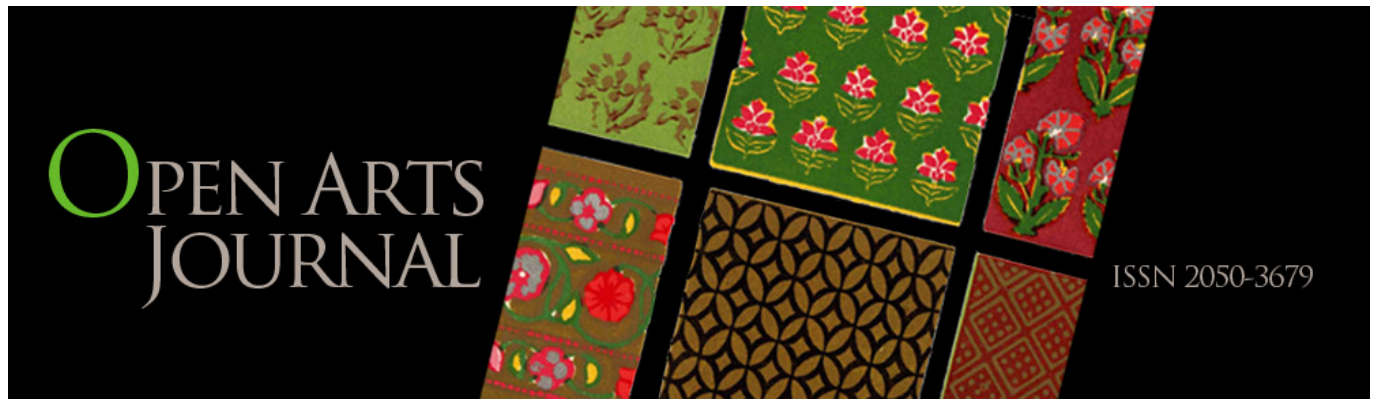
Version: Version of Record

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.5456/issn.2050-3679/2020w07>

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COLONIAL HISTORIES, MUSEUM COLLECTIONS, FABLABS AND COMMUNITY ENGAGEMENT: FLOWS OF PRACTICES, CULTURES AND PEOPLE – A ROUNDTABLE

Amy Jane Barnes, Kim Charnley, Renate Dohmen and Nicole Lotz

Abstract

This roundtable explores how issues of the local and the global register and are negotiated in the disciplines of art history and design with regard to two projects: Suits and Saris by Amy Jane Barnes (Art History) and La Campana Community FabLab by Nicole Lotz (Design). It seeks to probe what such a transdisciplinary discussion might entail and what the differences and similarities in our approaches might be. The discussion aimed at enriching our practice by stepping out of frames of professional reference and becoming familiar with perspectives and discourses from the related but also distant fields of art history and design respectively, which, moreover, at the Open University are embedded in the humanities and STEM (Science, Technology, Engineering and Maths) and therefore inhabit distinctly different vocational worlds.

It presents an experiment in bringing the chosen case studies into close proximity to see what would emerge, with process an important element of the discussion. The present format of the roundtable constitutes the culmination of a range of exchanges over a period of time that acquired its present shape as themes began to emerge around which conversations began to cluster. Topics broached include transnational histories and their negotiation, issues of power and representation, forms of community engagement and participation, glocal exchanges and practices of making, as well as methods and approaches.

Keywords: British-Asian fashion, design thinking, colonialism, community engagement, design, art history, museums, FabLab, exhibitions, museum classifications, East-African Asians, co-design, cultural heritage, clothing, digital fabrication, participatory design, Mexico

Full text: <https://openartsjournal.org/issue-9/article-7>

DOI: <http://dx.doi.org/10.5456/issn.2050-3679/2020w07>

Biographical notes

Amy Jane Barnes is an academic, curator and researcher with wide-reaching interests from Asian art and visual cultures, to museums, their collections and the stories they tell. She has an academic background in art history and museum studies, with a particular interest in how art and design from twentieth-century China is collected, interpreted and displayed in British museums. She has worked in museums as a curator and researcher, and taught art history and museum and heritage studies at several universities. Since November 2019, she has been Staff Tutor in Art History at The Open University. Amy is the author of a monograph, *Museum Representations of Maoist China* (Ashgate/Routledge, 2014), and several edited volumes, most recently *A Museum Studies Approach to Heritage* (Routledge, 2018).

Kim Charnley is Staff Tutor at The Open University. His research specialism is contemporary art with a focus on 'post-object', socially engaged art such as 'social practice', art activism and institutional critique. He is also interested in the intersection between art, design and craft and, especially, the way that avant-gardes have at different times conceived of themselves as collectives. He has published in journals including *Art and the Public Sphere*, *Art Journal*, *Historical Materialism* and *The Large Glass* and contributed an introduction to *Delirium and Resistance: Activist Art and the Crisis of Capitalism*, a collection of essays by the artist and theorist Gregory Sholette (Pluto, 2017). A monograph exploring the role of the collective in contemporary art's politics, titled *Sociopolitical Aesthetics: Art, Crisis, Neoliberalism*, will be published by Bloomsbury in early 2021.

Renate Dohmen is Lecturer in Art History at The Open University. She edited and co-authored *Art and Empire: British India* (Manchester University Press and The Open University, 2018). Her monograph, *Encounters beyond the Gallery: Relational Aesthetics and Cultural Difference* (I.B. Tauris, 2016), examines issues of contemporary art, relational aesthetics and Deleuze-Guattarean thought, anthropology and issues of cultural translation, challenging Eurocentric perceptions and modes of critical address of tribal and folk visual practices. She has published in journals including the *Journal of Design History*, *Ecumene: A Journal of Cultural Geographies*, *Victorian Literature and Culture* and *South Asian Popular Culture*, and is currently working on a book-length study of nineteenth-century exhibition culture in British India supported by the Leverhulme Trust that examines issues of amateurism, gender and race.

Nicole Lotz is Senior Lecturer in Design at The Open University. She is interested in design processes, collaboration and engagement across boundaries and at the margins. She has published multiple articles in journals across the disciplines of design, education and international development. Her work seeks to offer opportunities for disadvantaged communities to engage and persevere through social and communal learning, even in challenging situations. Nic's research is heavily influenced by her upbringing in East Germany, lived experiences in Hong Kong and the UK, and fieldwork carried out in South-East Asia, Africa and Latin America.

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Amy Jane Barnes, Kim Charnley, Renate Dohmen and Nicole Lotz (The Open University)

Introduction

This essay uses the format of a roundtable discussion among colleagues at The Open University to engage with issues of the local and the global in the disciplines of art history and design. Key antecedents to this experiment were inter-departmental meetings between Art History and Design that were intermittently staged over a number of years and were envisaged as spaces of encounter and exchange. Attendance and participation at these meetings fluctuated, with colleagues giving short introductions to their research projects followed by a Q&A; a format that allowed for some lively debates but only occasionally progressed to more sustained levels of engagement. The enriching cross-disciplinary conversations between Nicole Lotz, one of the discussants of the roundtable, and myself as part of a PhD supervision team that met over several years, also need to be mentioned here, as they, in essence, gave rise to this roundtable.

Another point of reference is my background in studies related to design as part of my professional training and my engagement with practice-based students from fields ranging from fine art to design and architecture in my previous teaching role, which raised questions for me about bridging the divide between practice and theory as well as between art and design, especially with regard to pedagogy.

An aim of our discussion was to examine possible meeting points between the disciplines, to explore how our investments might differ and to consider the ways in which disciplinary perspectives shape our professional engagement. We also realised that such an interrogation required an experimental format to let cross-disciplinary conversations to unfold, and early

iterations of the discussion thus were free-flowing, rhizomatic affairs that allowed themes to emerge.

The discussion that is presented here thus entails a degree of 'shape shifting'. This includes my role, which morphed from moderator to participant over time, blurring the boundaries between an outsider/insider positionality, and the invitation that was extended to Kim Charnley from Art History to join the conversation at a later stage. From the outset, therefore, we sought not only to dialogue with one another, but also to engage self-reflexively with the question of what may be involved in creating such a conversation.

The roundtable's present format thus constitutes the culmination of wide-ranging exchanges that occurred over a period of time in a process characterised by rushes of exchange, pauses and hiatuses, as well as trajectories never brought to fruition. It entailed the working through of difficulties and the, at times, frustrating experience of disciplinary languages being at cross purpose, as well as sudden shifts when the conversation moved from a talking *about* to a conversing *with*, repeatedly cycling between such phases as the conversation evolved and moved on to other topics. The roundtable in its present format thus is the result of a messy, layered process and constitutes a 'fashioned object' much like the ones at the heart of *Suits and Saris* and *La Campana Community FabLab*, the two case studies that served as focal point for the conversation.

Suits and Saris, the project Amy Jane Barnes has chosen to discuss stems from her work as freelance researcher and curator for New Walk Museum & Art Gallery in Leicester, when she contributed to the development and execution of the exhibition (March–October 2012). It was part of the East Midlands' 'Dress the World' strand of the Cultural Olympiad and funded by the Heritage Lottery Fund (HLF). The exhibition explored the global, historical and contemporary interconnections and interactions between South Asia, East Africa and Britain in the development of British-Asian style and British fashion more widely. Nicole's project *La Campana Community FabLab* is ongoing and located in Monterrey, Mexico. The Higher Education Links programme by the British Council Mexico, which funded this project twice, aims at building international links between Mexican and British higher education institutions. She brings her design and distance-learning expertise to the project as international academic collaborator and adviser to the location team in Mexico.

R.D.

Roles, situatedness and contexts of involvement

Renate: Can we begin with some scene setting about your projects, specifically on the nature of your roles in them?

Amy: By the time I joined the exhibition team for *Suits and Saris*, the project was well developed. Much, but not all, of the community participation work, focused around workshops, had already been undertaken by Malika Kraamer, then Curator of World Cultures at New Walk Museum and lead curator on this project, in conjunction with other members of the exhibition development team. Research in Nairobi with East-African Asian-owned sari shops and community groups had also been completed at this stage and, if I remember correctly, the key themes and interpretative approaches had already been set. My role was to help with researching the collections, undertake interviews with community curators and individuals in and around Leicester, write exhibition text and assist with the remaining participatory workshops.

Nic: My involvement with *La Campana Community FabLab* was initiated through an invitation by the University Tecnológico de Monterrey to facilitate design workshops in Monterrey, Mexico. In 2018, I gave a keynote and co-facilitated a week-long design-thinking workshop held at the University with academics, students and representatives from underserved communities in the north of Mexico. Community representatives ranged from the blind, visually impaired and ethnic minorities in Mexico to the socio-economically challenged La Campana-Altamira neighbourhood, which is located just opposite to the University campus. This unusual involvement of different stakeholders in an academic workshop was inspired by the requirement of the funder of the Higher Education Links workshop, the British Council Mexico, to disseminate the results of the workshop to a wide academic and non-academic audience. By involving them from the beginning of the project, we transformed dissemination to active participation. And, to explain, design thinking is a process that supports the understanding of problematic situations and stimulates creative responses to change them; a process that is most successful when those who experience these situations are actively involved. The participants of the workshop developed several proposals to address the challenges they experience as marginalised communities.

One proposal that emerged was a community FabLab (Fabrication Laboratories) for the La Campana-

Altamira (FabLab La Campana-Altamira, 2020). The concept was developed further by academics from Tecnológico de Monterrey and local governmental and nongovernmental organisations, who partnered with the academic institution, as Tecnológico de Monterrey has a special mission to support the neighbouring La Campana-Altamira neighbourhood.

A long process of negotiations with the community and writing funding applications took place, in which I was not involved. Once additional funding was secured to test the ideas that had been developed in practice, I was invited back to co-facilitate a further series of co-design workshops with members of the La Campana-Altamira community in 2019. I thus contributed to creating a local community FabLab by engaging the community in learning through making. Further local partners, FabLat Kids and Insitu Social, were tasked to implement the FabLab with the local High School CebTis 99 between 2019 and 2020.

Renate: Can you perhaps give us some context about FabLabs and what they entail?

Nic: In a nutshell, FabLabs are non-formal educational settings that provide expertise and equipment, such as computers, 3D printers and laser cutters, to enable local digitally enhanced making in collaboration with others. They aim to empower individuals to learn to create objects and devices in response to local or personal needs. FabLabs are closely aligned with the DIY movement, maker culture and the free- and open-source movement. They are interconnected globally and loosely associated with an umbrella organisation, the Fab Foundation. Currently, there are around 1750 local FabLabs that share ideas and solutions across their global networks (see, FabLab.io).

Aims

Renate: Thank you – your comments have been really helpful to give a sense of your roles in these projects and of their wider contexts. Could you now tell us about the overarching aims of your projects?

Amy: A key perspective that informed the project was that in the development and execution of *Suits and Saris*, we actively avoided presenting one, overarching narrative. We wanted to foreground (and represent) as many voices as possible – although the goal of creating a truly representative exhibition is, in practical terms, unlikely to be achievable when considering a community as diverse as Leicester's South Asian population.

But, with this in mind, our aim was to avoid presenting visitors to the exhibition with a 'neat'

story or chronology, or even a history of British-Asian fashion, as such. Instead, we wanted to actively engage them in thinking about issues around clothing and identity, and how they, the visitors, express their identities through what they wear, regardless of their ethnic background. So, while this was to be an exhibition largely focused on the sartorial choices made by British-Asian communities in Leicester, it aimed to have cross-community relevance. In Leicester, as is likely to be the case in other parts of the country with large South Asian diaspora communities, people from many different backgrounds will own at least one 'South Asian'-style garment, bought, for example, to attend a friend's or colleague's wedding. Many others may have incorporated South Asian influences into their daily dress without being aware of the origins of these, such as the trend for wearing dresses over leggings and trousers (inspired by *salwar kameez*).

Our goal was to cast light on these stylistic influences and foreground the shared experiences of people who have made the super-diverse city of Leicester their home. So, as a result of the stories that

emerged during the research phase, the exhibition and related programming was based around a series of unexpected and interrelated stories that emerged from the original research and the active participation of community curators. These themes explored transnational identities and multiple-migrant experiences as expressed through dress. Visitors to the exhibition encountered multiple voices, perspectives, experiences and interpretations of existing and newly acquired objects in the museum's collection. But we also wanted them to actively think about how they related to the objects on display and the themes explored within the exhibition.

I should also mention here that one part of the exhibition – *Building a Collection* – drew on an existing collection of clothing from Gujarat in India, which had originally been collected in the 1980s in order to represent the cultural heritage of East-African Asians in Leicester in the museum's collections (Fig. 7.1). The decision to collect this material was prompted by members of the community, who expressed concerns that young people were losing touch with their roots.



Figure 7.1 *Building a Collection, Suits and Saris*, New Walk Museum and Art Gallery, Leicester, 2012. (Photo: Amy Jane Barnes)

Renate: How about you, Nic? Could you tell us more about the aims of your project?

Nic: First of all, picking up on Amy's reference to histories of migration, I wanted to say that the project constitutes an international collaboration between Mexican and British academics and Mexican university students from different disciplines. The aim of the Higher Education Links programme by the Mexican British Council, which funded the project twice, is: 'to collaborate internationally and to gain access to UK expertise' (British Council, 2020). Most other HE Links-funded projects don't involve communities directly, as we did. In addition to focused workshops for Mexican higher education students and academics, this project aimed at a more direct exchange of expertise between UK academics and local Mexican communities. More concretely, the project aimed at reciprocal learning and exchange of expertise. That is, the UK academics 'learnt from lived experiences' in Mexican underserved communities, and the Mexican community participants 'learnt complex concepts through hands-on making' in a multifaceted way. For younger Mexican children it is about the creative application of STEM (Science, Technology, Engineering and Maths) knowledge, for young adults it is about developing employability skills, for adults it is about gaining new ideas for a business, for example. For a neighbourhood or community, it is about improving the local environment in collaboration with others. A commonality is that the learning creates opportunities for socio-economic development and it provides avenues for lifting the participants and community out of poverty through the learning of new skills and the gaining of confidence and self-esteem.

Also, it needs to be said that the aim of the British Council Mexico is to support academic institutions to translate their expertise to become regional development drivers for 'economic and societal benefit' (British Council, 2020). The academic institution in this instance is Tecnológico de Monterrey, which endorses a mission of social responsibility and sought to have a direct impact by engaging with members of differently marginalised communities in the north of Mexico as well as governmental or non-governmental institutions who were also directly involved in the project.

Renate: As the project seeks to improve the lives of the participants, this raises issues of its larger political contexts, could you give us some further details here perhaps?

Nic: When the former Mexican president Felipe Calderón declared the 'Drug War' in 2006, the

neighbourhood of La Campana-Altamira, like many others, became a site of open drug trafficking, cartel conflicts and violence (Durin, 2012). With the peak of violence in 2012, a new policy of de-escalation of cartel and government conflict led to a calming of the situation and the La Campana-Altamira neighbourhood sought a change through open engagement in public life. Several community projects have been initiated in this neighbourhood since, with Tecnológico de Monterrey a partner in many of them, contributing academic expertise and donating equipment, for example.

Renate: If I understand this correctly, this is an ongoing, 'live' project?

Nic: Yes, I continued to engage with the project remotely during the pandemic and have sought to create hybrid learning spaces to continue to engage with the community virtually. We received some seed funding from The Open University, for example, to test a new, remote making approach. We intend to send maker kits and distance-learning instructions together with networking technologies to La Campana families to continue to engage in remote hands-on learning from their homes. The local networking aims at creating social learning and exchange between families who are stuck in their homes and cannot come together physically in a FabLab.

Transnational histories and flows

Renate: What has emerged so far is that both projects involve inter- and transnational interactions and negotiations. Could you perhaps tell us more about this aspect of your projects, and how it was addressed?

Amy: In our case, our community curators were drawn from sari shop owners, elders in the East-African Asian community in both Leicester and Nairobi, the Leicester Arts and Museum Service (LAMS) youth panel and postgraduate students from the School of Museum Studies at the University of Leicester. Discussions were also informed by specialists in advisory roles, to ensure that interpretive approaches were academically sound.

Apart from the high level of community consultation and the direct involvement of community curators in the development phase, perhaps what made *Suits and Saris* somewhat atypical in comparison with similar exhibitions, was the extent to which it engaged with the processes of identity-making through clothing in the contexts of multiple migration and transnationalism (see, Kraamer & Barnes, 2018), with a particular emphasis on the East-African Asian community in Leicester.

Renate: How does this compare to the approach taken in your project, Nic? What role did local partners play and how were they selected?

Nic: There are several levels of exchange across cultures that impact on my project. There were the Mexican academics, who initiated the project, and who opened a call for participation and used their existing networks to recruit participants and partners. And then, in the second series of co-design workshops, new regional partners joined – a Latin American organisation who promotes the community architecture in low socio-economic settings (Insitu Social), and a children-focused making organisation that promotes learning with digital technologies (FabLat Kids). Both organisations use digital fabrication technologies in marginalised communities in their projects across Latin America.

What is perhaps interesting to note in this context is that while the founders of the organisations are from Columbia, Venezuela and Mexico, they met during a year-long Master's course in Advanced Architecture and Digital Fabrication in Barcelona. Having spent time overseas, they returned to Latin America and brought new influences back home to address resource deficiency in sustainable and innovative local community projects. With their expertise, more community members were involved by directly engaging them in activities on the street, at the market and in the local high school. The focus of the project was less on ensuring academic soundness, as was the case in some aspects of Amy's project, but on re-contextualising and usefully applying academic skills and knowledge in collaboration with a local community.

Renate: This brings me to another question – colonialism – which of course looms large as historical context that gave rise to the transnational movements that inform your projects. Could you perhaps speak to how colonial histories perhaps made their presence felt and were reflected in them?

Amy: Yes, this is a really important issue that was directly addressed in the exhibition. Colonial histories and relationships between Britain and India were, for example, explored in several sections of the exhibition, including through colonial photography and the popularity of paisley shawls in the Victorian period. And while the section *Building a Collection* was not explicitly about empire, the legacies of colonialism are inherent in the presence of the Gujarati textile collection in a museum in the East Midlands of England, of course. In more subtle ways, too, the collection, which included *chaniya choli* (an outfit comprising a cropped blouse

and skirt), *ghaghara* (long, gathered skirts), printed and tie-dyed shawls, men's and women's wedding outfits, showed this influence in the way in which it had been classified as ethnography on its accession to the museum, rather than as 'fashion', and as an assemblage of 'textiles' rather than of clothing (see Fig. 7.1).

Renate: This is a really important point. Such classifications are a direct reference to colonial history where clothing was seen as an ethnographic marker and was used to categorize people. This is evident for example in ethnographic surveys of India such as famously *The People of India: A Series of Photographic Illustrations, with Descriptive Letterpress, of the Races and Tribes of Hindustan*, a multi-volume undertaking (Watson & Kaye, 1874).

It is also worth noting that caste, which was considered a native category and hence an appropriate signifier in the colonial era, became a dominant way to



Figure 7.2: Kesarah Nutni, low caste Hindoo, Allahabad. Photograph from *The People of India* (1874). The same image was used in *The Textile Manufactures and the Costumes of the People of India* by Forbes Watson who was also the key author of the *People of India*. In the latter, the image was used as an example of saris as loom-made 'female cotton attire', and captioned as: 'Shows Cholee or bodice with short sleeve' (Watson & Kaye, 1874, plate V facing p.40). (Image credit: New York Public Library, <https://digitalcollections.nypl.org/items/510d47dd-b1da-a3d9-e040-e00a18064a99>)

categorize the population, which paradoxically led to the loss of fluidity between castes prevalent prior to the arrival of colonialism. Then there were taxonomies of race of course, which, based on supposedly 'scientific' approaches, sought to 'map' human development. This not only involved body measurements but also the taking of photographs considered to be objective tools of scientific enquiry, so ideas of documentation and classification were intricately aligned in the colonial context (Fig. 7.2).

Amy: Yes, caste is certainly something that surfaces in the museum context. In the 1980s, when the Gujarati textile collection was assembled and entered the museum, there were clearly concerns and sensitivities around caste as a blanket system of reference. Consequently, although some of the pieces could have been identified as originating from a particular caste community, they were instead categorised within the museum by family name or the village from which they had been acquired (although anyone with the appropriate cultural knowledge would have been able to determine caste from the name and location).

Renate: This is really interesting to hear and the fact that the exhibition actively and self-reflectively engaged with these legacies is significant. Was this challenging for the museum? I am asking because colonial legacies often continue to determine the categorisation of objects in museum collections and frequently revolve around perceived notions of cultural authenticity. For instance, how did the museum account for an East-African Asian example; that is a mix of cultural geographies steeped in colonial histories?

Amy: I can't speak for the museum, as I was a freelancer brought in to work on the project, rather than an employee who was party to discussions about how to address such issues. But, at around about the same time as *Suits and Saris*, New Walk Museum put on a community co-curated exhibition called *From Kampala to Leicester* (July–September 2012) (see, LCC & Navrang, 2012). This exhibition specifically focused on the experience of expelled Ugandan Asians and featured objects loaned by members of the local community and new commissions made for the exhibition. Later, this temporary exhibition developed into a permanent display at Newarke Houses Museum – the city's social history museum. And so, we can assume that collections (and certainly displays) are now more representative of the lives and experiences of East-African Asians in Leicester than they might have been before 2012.

But, thinking back to the time when we were working on *Suits and Saris*, the Gujarati textile collection (with some cooking utensils, collected in the field at the same time) were, if my memory serves me correctly, the principal assemblage of objects within the museum's holdings identified with the East-African Asian community in the city. And because these had been collected in consultation with the community, they may have had a veneer of 'authenticity' that was augmented by how the textile collection was categorised within the museum. Incidentally, prior to *Suits and Saris*, the collection had only been shown once, not long after it had been collected, in 1988–9. A few items had been used in handling collections and others were on permanent display in the World Cultures Gallery. But the bulk of the collection had not been seen in public since the late 1980s. In storage, a collection isn't representative of anyone!

Returning to the way in which the collection had been organised by family name and village, these were artificial distinctions. By the time the collection was acquired, you were just as likely to see young women in Gujarat wearing, and mixing and matching saris (not a 'traditional' Gujarati item of clothing), *salwar kameez* (once more associated with the Muslim community), t-shirts and jeans, with Gujarati-style clothing (separate blouses and skirts, for example), reserving the heavily embroidered and embellished 'traditional' Gujarati-style wear for special occasions. On speaking with elders in Leicester's East-African Asian community, it became clear that in their youth, too, in Uganda or Kenya or Tanzania, they had also mixed and matched in this way, incorporating wax resist and other East-African influences into their daily wear, alongside some Gujarati-style items (in terms of cut or embroidery motifs). These were often worn interchangeably regardless of the caste community in which they may have originated or the background of the wearer.

This highlighted the problematic way in which the collection had been organised, that is, as an ethnographic collection rather than as 'fashion'. In real life, as opposed to the collection's museum 'life', the people who wore these or similar articles of clothing, didn't necessarily associate them with such-and-such a village or a particular family name. These classifications were an imposition of the 'museumification' process. And so, the *Building a Collection* section of the exhibition sought to give the opportunity to participants and visitors to challenge the effects of the museum and its control over the knowledge attached to objects in collections and how they are interpreted, represented and displayed.

Our research thus emphasised how artificial or rigid distinctions and classifications made by museums in the accession and cataloguing process may inadvertently fix meanings and cultural values, and divorce objects from their uses and the lived experiences of them, as well as the multiple and changing meanings ascribed to them over time.

So, in the section *Building a Collection*, visitors were prompted to think about what museums do, how they change collections, fix meanings and represent source communities, as well as their own local audiences. The introductory text panel to this section of the exhibition drew the visitors' attention to how museums collect and why. We thus introduced the concept of curatorial



Figure 7.3: Ornaments from embroidered and woven fabrics and decorations on vases exhibited at the Indian Collection of the Great Exhibition, 1851, Owen Jones, 'Indian No.4', in Owen Jones, *The Grammar of Ornament* (1865 edn). (Image credit: Rawpixel – file licensed under the Creative Commons Zero (CC0) license)

authority and selection ('museums are not neutral') and how museums can have the effect of essentialising other and marginal experiences within a dominant culture. Quite weighty, philosophical stuff for a temporary exhibition at a local authority museum!

Renate: This is a fascinating case study and an important one because it engages with the complex and weighty legacy of exhibitions in the colonial era. The impact of this history can hardly be exaggerated since exhibitions constituted what one could safely call an obsession amongst European nations in the period of high imperialism, with the Great Exhibition initiating this phenomenon in 1851. The representation of empire in these hugely popular public events revolved around the classification of goods and wares, divorced from their contexts of origin as they were, re-contextualised through exhibitions guides, catalogues and lectures, echoing the classification of its peoples already mentioned.

Items of manufacture and raw products thus were assembled, classified, organised, displayed and judged according to their place and mode of production, method of distribution, material or themes, employing European taxonomies and categorisations that were drawn from the disciplines of history, ethnography, archaeology and art history, and in turn also informed them. Moreover, many of the colonial objects displayed in such exhibitions found their way into prominent museums, such as the V&A, for example, and formed the basis of their collections. So empire, exhibitions and museum collections are intricately linked and this is an important legacy that is becoming ever more urgent to address.

And then Indian textiles of course played a key role in articulating the principles of 'good' design that became fundamental to British design education in the nineteenth century. Notable here is Owen Jones' *Grammar of Ornament* ([1856] 1868), which in part drew on design elements of Indian textiles that were incorporated into an overall modern design language for the industrial age (Fig. 7.3). This history has, I presume, a bearing on your project, even though the original collection of textiles the exhibition is based on was collected well past the period of the British empire, in the 1980s?

Amy: Undoubtedly these colonial legacies and the long history of the use, interpretation and representation of South Asian textiles in exhibitionary contexts in Britain had an implicit bearing on how this collection was made and classified. Not least the legacy of nineteenth-century ideals of 'good design', with the choice to

collect examples of embroidered and tie-dyed textiles, as opposed to other categories of objects. Curatorial interests, perceived gaps in collections – a whole host of other factors may have come into play in this case. But it bears repeating that the collection was originally made in consultation with the community. The then curator was guided by what the East-African Asian community in Leicester (or at least those members of the community who were consulted) felt would best represent its cultural heritage. Which, for a number of reasons, perhaps including the influence and legacy of colonial representations of South Asian culture, was, at that time, felt to be Gujarati clothing (see Fig. 7.1).

Renate: What strikes me about the kind of transnational flows of expertise and instruction that are integral to your project is that one could say that there are parallels with colonial history, certainly with regard to the directionality of these flows. And then there is an overall mission of improvement, which does resonate with the civilizational rhetoric integral certainly to the British colonial project.

What I was thinking of is the fact that British colonial officers and art educators taught Indian artisans in government schools of art and design in the colony about true Indian designs, that is, they instructed the very artisans who had produced these designs for generations, how to create what they considered to be 'authentic' Indian designs; an understanding that was based on the kind of categorizations we have already mentioned which were steeped in European rather than Indian cultural values. In the minds of colonial officials, they were saving India from what they saw as cultural contamination through the colonial encounter.

And just for interest, there is an object lesson in what was considered 'authentic' Indian design on public view in the garden of Hove Museum in Brighton, near the path that leads to the museum entrance – the 'Jaipur Gate', an intricately carved wooden construction (Figs. 7.4–7.6).

It was created for display at the Colonial and Indian Exhibition, South Kensington, 1886, and was designed by the engineer-turned-architect Samuel Swinton Jacob, Executive Engineer to the princely state of Jaipur. It was financed by the Maharaja of Jaipur. The gate eloquently speaks to this history British appropriation and reinvention of traditional Indian designs, as British officials instructed the woodcarvers to decorate the gate with 'traditional' and 'purely Indian' ornaments only, directives which countered Indian decorative traditions that had thrived on adaptation and change, freezing them in time.



Figure 7.4: Scene showing the 'Jaipur Gate' from the 'Colonial and Indian Exhibition: Indian Empire', engraving in *The Illustrated London News*, 17 July 1886. (Image credit: World History Archive/Alamy)



Figure 7.5: The 'Jaipur Gate' in the garden of the Hove Museum in Brighton. (Image credit: George Rex)



Figure 7.6: Wood carvings, 'Jaipur Gate', Brighton/Hove.
(Photo: Duncan McNicol)

Nic, your project and the nature of your engagement is very different of course, but there have certainly been critiques of design thinking as inherently colonial (Diethelm, 2016). Could you perhaps speak to that?

Nic: Yes, FabLabs received the critique that they introduce 'Western technologies' into local communities and underrepresented groups and that this process constitutes a new form of colonisation. Also to say that before I joined the project, I had never been involved in FabLabs or digital fabrication. This approach was entirely introduced by the Mexican hosts and their local collaborators who, moreover, emphasise the educational aspect, and the skills and knowledge that are developed by employing advances in modern technologies in the communities they work with.

As already mentioned, I was invited for my background in using design thinking in STEM education contexts and have been teaching design thinking at The Open University for the last 10 years, employing variations of design-thinking processes across Asia, Africa and Europe. And design thinking of course is a term monopolised by the 'Global North', as it was first used in the United States and the UK. But I would argue that the underlying processes and practices the term describes are fundamentally human – that is, the finding and solving of problems in novel and contextually sensitive ways. This is why I believe I was invited to co-facilitate the design-thinking workshop in collaboration with Mexican academics from the Education and Engineering departments at Tecnológico.

As already mentioned design thinking constitutes a process that entails phases of problem identification and framing, creative ideation and prototyping, and reflective evaluation of proposals and prototypes. While this may sound like a linear, predetermined process, in reality, it is much more messy, holistic and discursive. With careful facilitation, design thinking taps into the creative skills and lived expertise of the local participants in the generation of locally appropriate designs. An underlying assumption is that everyone can be creative by employing processes and approaches (of design thinking) that bring the creative human qualities to the fore.

But colonial legacies certainly did impact on the project, which, however, surfaced in implicit ways that were never directly voiced or addressed as such, and which had mainly to do with how my presence and role in the project was perceived. When I wanted to discuss the pedagogical rationale of the project, I was, for example, misunderstood by some and thought to be a sales representative of digital fabrication technologies. Of course, this could have been due to a process 'lost in translation', as all our conversations were interpreted by a professional translator. The local team also strategically employed my whiteness to secure a better room to house the lab in the school than had initially been allocated, urging me to approach the head teacher with this request which proved successful. The fact that my whiteness generated a more favourable position to negotiate the FabLab location in school thus reveals the continued presence of deeply entrenched structures that hark back to colonial times.

Renate: Thanks very much, Nic, for giving us more context about what design thinking entails 'in the field' so to speak, and the ways in which you noted coloniality showing up in your interactions. You also gave us more context about FabLabs which was very helpful for those of us who are not familiar with them, such as most art historians I would imagine, with the notable exception of Kim, who I would like to bring into the conversation at this point. Kim is there anything you would like to add to what has been laid out so far?

Kim: Nic, it's very interesting to hear your experience of working with a FabLab and your observations about the kinds of institutional and community collaborations that are involved in this work. I have some familiarity with FabLabs because Plymouth College of Art developed one, a great pedagogic and micro-scale manufacturing resource which students engage with in often highly creative ways. I was also able to attend

talks by the Director of FabLab Barcelona, Tomás Diez, on a couple of occasions at *Making Futures*, the international craft and digital making conference (see, *Making Futures*, 2019).

Also, to say that FabLab Barcelona are involved in some excellent work. I was struck, for example, by their Smart Citizen kit, a simple and cheaply produced 'distributed tool' that is intended to empower citizens to be able to monitor and provide data on air pollution, noise pollution and other indicators in their homes and workplaces (IAAC, n.d.). There is potential in this kind of work to alter the balance of power in democratic decision-making within the urban environment. Yet, from another point of view, some of the claims made for FabLabs are clearly techno-utopian. Diez often speaks of a future where FabLabs will play a central role in what he terms 'distributed production' (2013). In our current global model, centralised manufacturers produce goods, which are shipped around the world to cities; waste products are then shipped in the opposite direction. Distributed production, by contrast, would involve products being made by FabLabs for hyper-localised markets, making use of shared digital networks and assets to create goods and supposedly removing the need for lengthy supply chains.

This is a kind of 'neo-artisanal' image of digital making that seems to reinvent some aspects of the Ruskin-Morris argument. Indeed, these technologies are often framed as a space where design and material practice may interact in a site-specific and collaborative setting that allows for a new kind of interaction between 'making' and 'thinking'. There may be some truth to this. Diez is clearly right that the current organisation of centralised production and global distribution is unsustainable and damaging. But his claims for the potential of the FabLab overlooks exactly the kinds of social and institutional issues that you identify here. In my view, the potential for FabLabs as catalysts for change needs to be examined in relation to the obstacles that emerge in social contexts where these technologies are employed. This would provide a more nuanced debate about the challenges involved in creating the kinds of enormous change required to redress the damage now being done to our eco-system.

Nic: Kim, it is great to hear your balanced view of global FabLabs, which Diez also calls the FabCity (Diez, 2016). The FabCity project advocates an open, networked and distributed production. As you say, a key concept of the FabCity is that data (and ideas), not products travel globally. To a degree, I did observe these processes in the FabLab La Campana-Altamira project. Later on I will give an example, in which an

idea and associated data for digital making of a maker cart travelled across the network of collaborators and was produced in and adopted to the local context. My collaborators in Mexico work with Tomás Diez in Barcelona, and they also collaborate closely with another FabLab in Mexico, FabLab Yucatán, who further developed the environmental monitors you have mentioned to be used in local citizen science projects in Merida, Yucatán. I guess a valid critique here remains that by introducing 'colonial technologies' to marginalised communities, the dominant rhetoric of developments through technological advances will be maintained. I guess, a rupture to such dominant forms of ongoing technological colonialism can only be achieved by listening to the dreams of, and engaging deeply with the local communities, and exploring together how to use (or not) the affordances of these technologies to local and communal benefit.

Community engagement and participation

Renate: Thank you Kim and Nic, your discussion leads me to another issue that has emerged for me in this conversation, the one of community engagement and participation which features prominently in both your projects. Could you perhaps give us a sense of what community engagement entailed, and perhaps whether there might have been levels or layers of such engagements, given that such a reference often brackets a range of interactions?

Amy: A guiding principle of the Dress the World strand (which is embedded in HLF-funded projects more widely) was to engage directly with community stakeholders (whom we described as 'community curators'), as detailed above, bringing them together with museum practitioners in order to develop exhibitions. The exhibition's constituents had an active role in the evolution of most, if not all aspects of its development: themes and narratives were drawn up during the consultation events and workshops held in Leicester. These events comprised workshops, handling sessions and group and individual interviews. For some participants, this was their first experience of working on the development of an exhibition. For others, this work built upon the consultative work in which they had been involved in the 1980s, that led to the collection of the aforementioned Gujarati textiles. The exhibition emerged from a combination of community engagement, desk-based research, oral histories and interviews.

With regard to this heritage, I should mention that Gujarat was the region of India from which the ancestors of many members of the city's East-African

Asian community migrated to Kenya, Uganda and Tanzania while under British Imperial rule in the nineteenth century, often as indentured labourers. In the late 1960s and into the 1970s, after Africanisation policies and anti-Asian rhetoric fomented hostility against them, many East-African Asians migrated to Britain and other countries in the Commonwealth (many held British passports). In Uganda, Asians were forcibly expelled with just 90 days' notice. In spite of the then City Council's xenophobic, if not outright racist efforts to discourage them, many set up home and started successful businesses in Leicester (see, BBC News, 2012). While a large proportion of East-African Asians may never have lived in Gujarat (or India), it was nevertheless perceived by the community as its ancestral home and the source of East-African Asian culture, language and dress. In particular, the area around Kachchh was identified by the community advisory panel as an area with which many East-African Asian people had ancestral ties and, because it was less industrialised at that time (mid-1980s) than other parts of the state, it was felt to offer up more 'authentic' Gujarati textiles.

Thus, the aim of engaging with this community – from whom the idea for the collection came and for whom it was predominantly made – was to include them in reflecting on what the collection meant to first, second and later generations of Leicester citizens who identify as East-African Asian or as having East-African Asian and/or Gujarati heritage. So, one could say that the *Suits and Saris* project engaged multi-generational members of local communities on a number of levels. They participated in the development of the exhibition (and some of the collections on which it was based), through their collaboration, expertise and familial ties to India, as well as by being visitors to the exhibition, which encouraged them to engage in critical reflection on what this cultural heritage meant to them.

However, such projects involving questions of cultural heritage – what it constitutes and how it is conceived – are complex. Notions of authenticity are inherently problematic, tied up as they are in the legacies of colonialism. In a paper that reflected on our experiences of working on the exhibition, Malika and I noted that 'community advisory groups may not always help museums to grasp complex fluid, generation-specific, and memory-shaped migration histories' and that 'community projects, collection policies and exhibitions, have often been developed on the assumption that cultural heritage is un-problematically bound to migrants' "place of origin" (Kraamer & Barnes, 2018, p.601). There is a tendency in the museum world to assume that historical 'ethnographic'

collections (for want of a better description) will be of interest and relevant to the descendants of their source communities in the global diaspora. Instead, we argued that one cannot and should not make such assumptions. Neither can one individual (or advisory group) speak for everyone in that community. We need to be open about this and acknowledge it, lest we run the risk of essentialising contemporary diasporic communities. For example, some younger participants in the exhibition's development phase – second, possibly third generation British Asians or East-African Asians born in Leicester – didn't necessarily feel that the textile collection, as a whole, had any particular relevance to them, their lives or their cultural identities. Responses from visitors to the exhibition were varied: some commented that the clothing on display was of relevance to older members of the Asian community but not to them; others offered alternative ways of classifying and ordering the collection; some made connections with contemporary fashion trends in India; and others stressed the importance of using the textiles to teach young people in the community about their heritage. Full circle!

What emerged, then, is that we cannot or should not claim that such projects are truly representative. Inevitably, we relied on existing relationships in order to engage (self-selecting) participants. This raised some issues – the business of selling saris and Asian designer clothing is highly competitive, and naturally there are ongoing tensions and contestations between different business owners within the city. We were steered away from some more potentially sensitive themes by museum management, who were, perhaps,

wary of inadvertently attracting controversy and negative criticism. In particular, we were discouraged from openly discussing hair and face coverings in the exhibition. Instead, we approached this important aspect of British Asian fashion through explorations of mothers' and daughters' expectations around dress and fashion (with the goal of dismantling some preconceptions in the minds of the audience), and we displayed some modest outfits made by a fashion-forward, Leicester-based designer, without drawing attention to the 'modest' features of those outfits (full-sleeves, long skirts, turbans and head wraps, etc.).

Renate: Nic, I guess the context of your project is quite different as issues of representation or heritage and the histories they entail are not so prominent. And while it also entails multi-migratory histories, the movement ultimately is about a return journey from Europe to countries of origin in the Americas, and of introducing technologies there. Also the aim of community engagement is empowerment, which in a sense probably is part of the mix in *Suits and Saris* as well, but through owning one's culture and heritage rather than acts of making. Would this be a fair characterisation?

Nic: Yes, and crucially it was the new partners, the two Latin American organisations FabLab Kids and Insitu Social, who introduced a new meaning to community engagement through the element of empowerment, into the project. Both organisations use digital fabrication to promote community architecture in low socio-economic settings and learning with digital

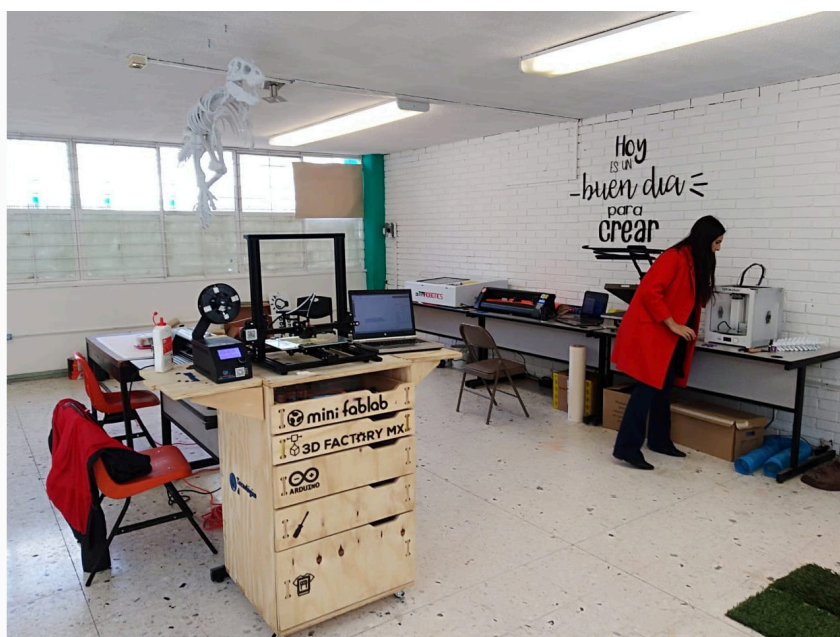


Figure 7.7: Left: Mobile cart developed by FabLab Yucatán for IYEM FabLab supporting teacher training in rural Yucatán and remote Mayan communities. (Image credit: Nicole Lotz). Right: Mobile cart by FabLab Tec de Monterrey for Community FabLab LaCampana. (Image credit: Rafa Machado)

technologies. That is, with their multi-migratory backgrounds and strong networks to other Latin American, US American and European FabLabs, they were able to translate and adapt the potential of digital fabrication technology that has been developed internationally to empower poorer communities locally.

An example of an adaptation of digital fabrication to local contexts was the use of mobile maker carts to house the valuable technology and materials (Fig. 7.7). Maker carts are usually used to transport technology across locations. Through regional collaborations in other projects, the Latin American organisations FabLat Kids and Insitu learned about the use of these mobile carts in remote locations or low socio-economic settings. Usually, the technology in a FabLab is installed permanently in the Lab space. But in this case the community was worried about security if the technologies were stored in the Lab space over night or at weekends, and rightly so, as there were break-ins twice. The mobile cart, which was digitally fabricated by students in the University FabLab at Tecnológico de Monterrey, responded to this as it allowed the technology to be stored securely after use, and hence, was not taken by the burglars. The translation process took the overarching concept of FabLab and adopted it to local realities.

Also, it is important to say that the mobile cart idea was developed in another Mexican community FabLab project, led by FabLab Yucatán and IYEM FabLab in Yucatán. The strong regional and global links between the makers allow to translate global ideas into local adaptations for suitability and to assess successful uses of these adaptations, such as that of a digitally fabricated mobile cart.

It should also be noted that installing the community FabLab in a classroom in a local high school was a compromise that emerged in this long community participation and translation process. The community FabLab thus was not as open to all as was initially imagined.

To show a potential wider use of digital fabrication technologies within the larger community setting, academics and members of Insitu Social interacted with a wider group of participants from the neighbourhood through walks, interviews, workshops and focus groups. The core stage was the co-creation, in which neighbourhood participants from different communities actively co-created the FabLab, the space, activities and roles. During this stage participants set up the room and the equipment, designed and conducted making activities, and negotiated the partnerships, roles and responsibilities of participants and partners.

Renate: This leads me to the kinds and levels of the empowerment the project sought to instigate. Could you expand on this perhaps?

Nic: Empowerment can be defined in two ways, as power to act more efficiently or to liberate from oppression (Keskinen, 2020, p.30). Here, both forms of desires for empowerment could be observed. The technologies are not introduced for their own sake, but to address the community's needs and problems. Thus, initially no technologies were introduced at all, but the community's problems and dreams were explored. This approach employed a kind of filtering and translation process through the community lens. First we explored with participants what empowerment means to the community. Only then were making activities introduced that addressed the community's desires more effectively involving digital technologies. Let me give you two examples. A desire voiced by high-school students was to learn in a more self-directed way and to just play with technology instead of being told what to learn, which points to empowerment as a liberation from a perceived oppression. Guerrilla gardeners and market stall holders, on the other hand, expressed a desire to clean up local public spaces and use them more effectively. Here is a concrete example, which has also been published (Lotz et al, 2019).

While the visibility of the FabLab was developed through engaging with a wide range of people of the neighbourhood, a bold physical statement was still desired as identified in community consultations (Fig. 7.8). Interviews, observations and community mapping activities of the urban and social context of the area have shown 'unsafe spaces' that facilitate anti-social behaviours (e.g., drug crime and violence, mugging, assault and illegal dumping) but also spaces that the community would simply like to use more or in a different way (e.g., a sports playing field that floods easily).

An ideation workshop with university and high-school students, and their teachers, generated ideas for possible intervention in these unsafe areas through brainstorming concepts based on geometric forms (Thomas et al, 2019). Ideas that were developed ranged from seating furniture and hanging tools for the Sunday market, planters, skate park and parkour objects as well as outdoor games. The geometric shape workshop introduced a further STEM learning aspect, that of how 3D forms can be constructed from a grid.

La Campana park and market exemplifies a problematic situation and unsafe space (Fig. 7.9, left) that has been changed into a preferred, safer space in this concrete-casting process (Fig. 7.9, right). Due to

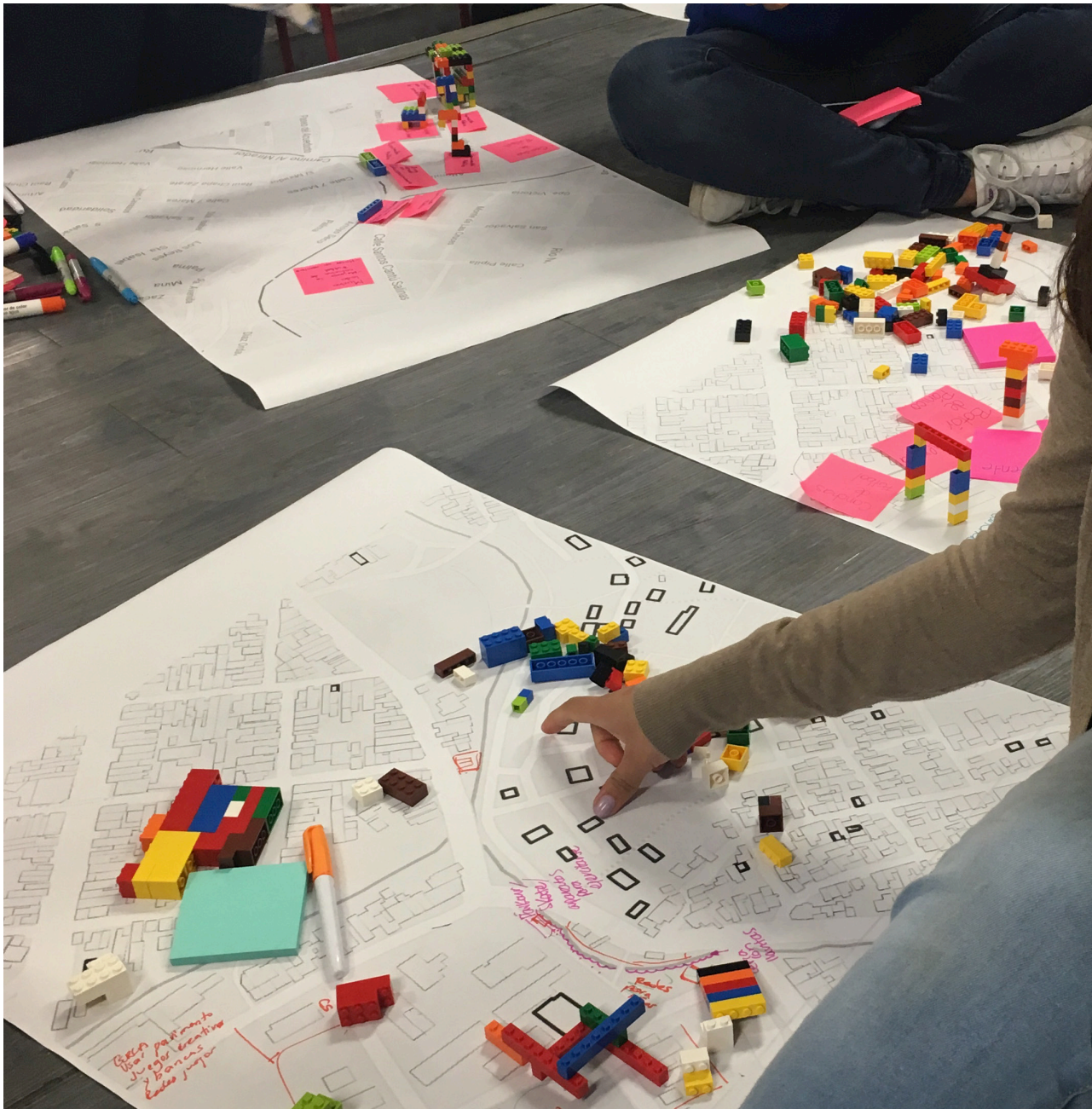


Figure 7.8: Discussion over a map of unsafe places and places of opportunities for interventions in La Campana-Altamira. Here a participant explains the problem of a dumpster left in a park saying: 'You need to put something else immediately after you take away the dumpster to indicate a change.' (Photo: Nicole Lotz)



Figure 7.9: La Campana park and market. Left: unsafe space due to illegal dumping of trash in public spaces (Photo: Nicole Lotz). Right: restructured public space through digitally fabricated and concrete-cast urban furniture and guerrilla planting (Photo: René Carmona).

a complex inter-neighbourhood relationship involving bribery and cartel activity, a public trash container had been placed illegally in the middle of a park along a river in La Campana. The park is also used for Sunday markets. In collaboration with a guerrilla gardener, the market union and the city government, Tecnológico de Monterrey students, the community FabLab and Insitu Social redesigned the area where the trash container had previously been placed. Insitu Social used a well-tested methodology of co-creation using digital fabrication and concrete casting of design interventions during this stage (Thomas et al, 2019, Lotz et al, 2019). They demonstrated how digital fabrication tools and concrete-casting approaches can achieve large-scale interventions with the community. The use of concrete was a requirement in reducing the likelihood of theft or vandalism. Concrete-cast objects together with new planted trees restructured the space and changed the associated illegal trash dumping behaviour.

Renate: What is apparent from your discussion is that technology and digitally enhanced ways of making are envisaged as an agent of change, certainly on an economic level, and are seen to provide solutions to concrete problems. What I also found interesting is your reference to desire in this context, which to me suggests not just a link to the 'magic' of making and of creation, but also to consumption and commodification. The lure of the object, the projections it invites, identities it suggests and gives access to, and the promises it makes could be said to present another point of reference here that has not been mentioned so far; that is, issues that are explored in cultural studies.

Kim, I know you have explored some related issues. Could you come in here perhaps?

Kim: It's great to see the intervention in the La Campana market, which I think provides a useful illustration of how design thinking, the FabLab and local community actors might combine to develop transformative interventions in urban space. As I mentioned earlier, Tomás Díez of FabLab Barcelona tends to represent the FabLab movement as an incipient form of a new network of distributed production, which might bring about a new economic model on a global level. Clearly these are grand claims and it's useful to explore them in relation to actual case studies. Problems of cultural difference and power certainly complicate Díez's futurism, as Nic has already observed in relation to the Monterrey project.

A question that emerges here for me is around the design process: the interaction of community

involvement, digital technology and fabrication in this example. The photograph (Fig. 7.9, right) seems to show that the street furniture is created in different shapes, some which seem to have been more obviously 'designed' than others. These objects seem to serve a number of functions simultaneously. On one level, they act as obstacles making it difficult to dump illegally in this location; they also have a decorative dimension, because some are faceted in ways that suggest a digital design process; they might be used as seats perhaps. What role did the participants in the FabLab play here? I'm guessing that they may have created models for the street furniture and perhaps even fabricated moulds. Presumably the concrete casting would have then been done by a specialist. I'm interested to know how this stage of the project interfaced with participants' stated desire just to play with the technology.

I ask this because it seems to me that the relationship between digital competencies and material processes, and the skills involved in making, is of central importance in understanding the potential of FabLabs to act as catalysts for social change. There are critiques of FabLabs, and maker spaces, that they often produce a lot of not-very-useful plastic objects, despite all of the excitement about the transformative potential of digital technology. These limitations seem to be most obvious where FabLabs do not establish relationships with people who have well-developed artisanal skills. The most interesting projects that I have seen are collaborations between craftspeople and digital specialists. Has the Monterrey project developed any relationships to local artisans or small-scale skilled fabricators?

Nic: These are good questions, Kim. Different participants in the FabLab project played different roles at different times in the process of designing and fabricating the concrete-cast objects. Briony Thomas, from Leeds University, together with Insitu Social facilitated a workshop that encouraged the exploration of 3D shapes (cut and folded from paper grids) in the ideation process (Thomas et al, 2019). Tecnológico de Monterrey students and CBtis High School students took part in this. Some ideas were further developed by the engineering students and digitally modelled in a software and then with help of the University FabLab and Insitu Social digitally printed as moulds. The concrete casting process in situ was done by a La Campana-Altamira community council member (who is passionate about the cleaning up of the community areas) together with university students (who wanted to explore luminous paint), and was supported by Insitu Social (the concrete casting specialist). The need

to clean up the market area of illegally dumped trash evolved through repeatedly unearthing local desires in community mapping and was further developed throughout all the phases of co-ideation and co-production. Identifying a key player in the community to support the implementation was central to its success.

You asked another interesting question about any relationships to local artisans or small-scale skilled fabricators. When I visited the market, I was surprised by the absolute absence of any local craft or small-scale skilled fabrication. This would have been the natural connection point between the FabLab and the section of the local community that is hard to reach. Most members of the community work in the informal economy and have no time or resources to engage in learning and reskilling. And, in fact, it was discussed in the team as one possible aim of the community FabLab, to support small businesses and entrepreneurial activities while re-connecting to traditional crafts and skill sets. The new project direction, which brings the learning of making and digital fabrication into peoples' homes during lockdown still pursues this goal. Local construction businesses showed an interest in concrete casting, and area social workers with whom we collaborate highlighted that any work should serve female entrepreneurs, such as local seamstresses, who have been hit hardest during the lockdown. We also hope to reach parents of children who were already engaged in the FabLab.

Power dynamics

Renate: A further angle that could perhaps be drawn out some more is how issues of power surfaced and were negotiated in your projects, often in relation to contingencies on the ground I believe? Could you perhaps expand on this?

Amy: An important point to mention here is that as a largely, though not exclusively, white curatorial team, working on behalf of an 'authoritative' organisation (for example, a city council-run museum), our privilege undoubtedly had an impact on the development of the exhibition and the level of access we were able to leverage with regards to key individuals within the local community. We were certainly aware of this to an extent; this was manifest in the theoretical approaches we took to problematising and reinterpreting the textile collection in *Building a Collection*. But this is certainly an issue that museums and other collecting/exhibition organisations, typically with overwhelmingly white and middle-class workforces, need to be aware of, especially when building and maintaining

relationships with diverse local and originating communities. Not least with respect to the explicit and implicit barriers that make such institutions 'hard to reach' for non-dominant and minority communities. If I were to become involved in a similar project in the future, I would seek to do more to foreground the voices and experiences of people from more varied and diverse identities during the research, development and writing phases. While the project was collaborative and participatory to a significant degree, the overarching interpretative authority remained with the curatorial team, the museum's management and, in turn, the local authority museum service.

Renate: How about you, Nic, is there anything you would like to add here?

Nic: I perceived shifts in power dynamics throughout the project. For example, the Latin American organisations were received with an open welcome by the community members, in a mix of curiosity, shyness and excitement. I received a different response from some of the community members on some occasions. I would say that I was seen more as a representative of colonial technologies and as a potential agent for Western exploitation disguised in the form of a donor. Let me give you an example. When I held a focus group with local high-school teachers to try and understand their curriculum and discuss how digital fabrication could be usefully introduced into some subjects they teach, their response was confusing at first. They welcomed the donations of the 3D printer and computers, but they asked about the costs of maintaining the machines and of purchasing filament to print objects. I wanted to discuss learning, they saw the dangers and pitfalls of 'development aid'. Even the idea of collecting discarded PET plastic bottles (that litter the community's streets and parks) and churning them up to produce their own filament was met with suspicion.

As mentioned, I was able to use my position to negotiate a more centrally located classroom to house the FabLab with the head teacher, where the local academics had failed so far, which allowed greater flexibility with regard to the layout of the room. For context, Mexican high schools mainly use 'frontal teaching' in which instructor-led teaching takes place from the front of the classroom, with the learners facing the teacher. This teaching style discourages direct interaction between learners. The FabLab in contrast offered a classroom that, through its layout, facilitated peer- and project-based learning in which the teacher

and learners are free to choose where to sit or stand and teachers act as demonstrators (Fig. 7.10).

I may have just been a catalyst in this instance as several shifts in power dynamics happened after I returned to the UK. Initially, it was hoped that teachers become more involved and organise Lab activities, either extra-curricular or integrated into their curriculum, but the time commitment was a limiting factor for already overworked teachers. Tecnológico de Monterrey community-work students and FabLat kits however continued to organise weekly digital fabrication workshops for different age groups. While these workshops introduced new making projects, ranging from jewellery to perfume and from silicone mould making to 3D charms printing, the students soon started to develop their own projects. One group, for example, designed and printed their own chess set. And a surprising turn in power dynamic was achieved when the high school's night porter became the lab manager. Here, the beginnings of empowerment in the definition of a liberation from perceived oppression (aka teacher-directed learning) can be seen. Having said that, the direct involvement of other members of the La Campana-Altamira community is still a challenge in a FabLab that is located in a high school.

There is also an unequal representation and involvement of the teachers of the high school in which the FabLab is housed. Since the project started during

term break, a wide representation of teachers was not possible and only two teachers took part in the initial co-creation activities. Consequently, when the term started, a full inclusion of the larger teacher body in the FabLab activities was difficult to achieve. Incidentally, this might have had a positive side effect, allowing the high school students to learn in a more self-directed manner.

Further unequal representation in participation was generated by the funder's requirement to engage a large number of Tecnológico de Monterrey students, with the result that some co-design workshops were more imbalanced in terms of how many members from each stakeholder group participated. For example, the original ideas for concrete cast objects were developed by many university students and high school students, but the actual casting of the objects to restructure the market space was driven by just a few students, a concrete-cast specialist and one community member in collaboration with the market union, local government and guerrilla gardeners.

Finally, while the FabLab is used for individual learning projects and community urban-design projects, the aim to develop entrepreneurial ideas to advance the community members' socio-economic status, proved the most difficult to reach. The hope is that through the enculturation of children in the making with digital technologies, a slow change to realise their

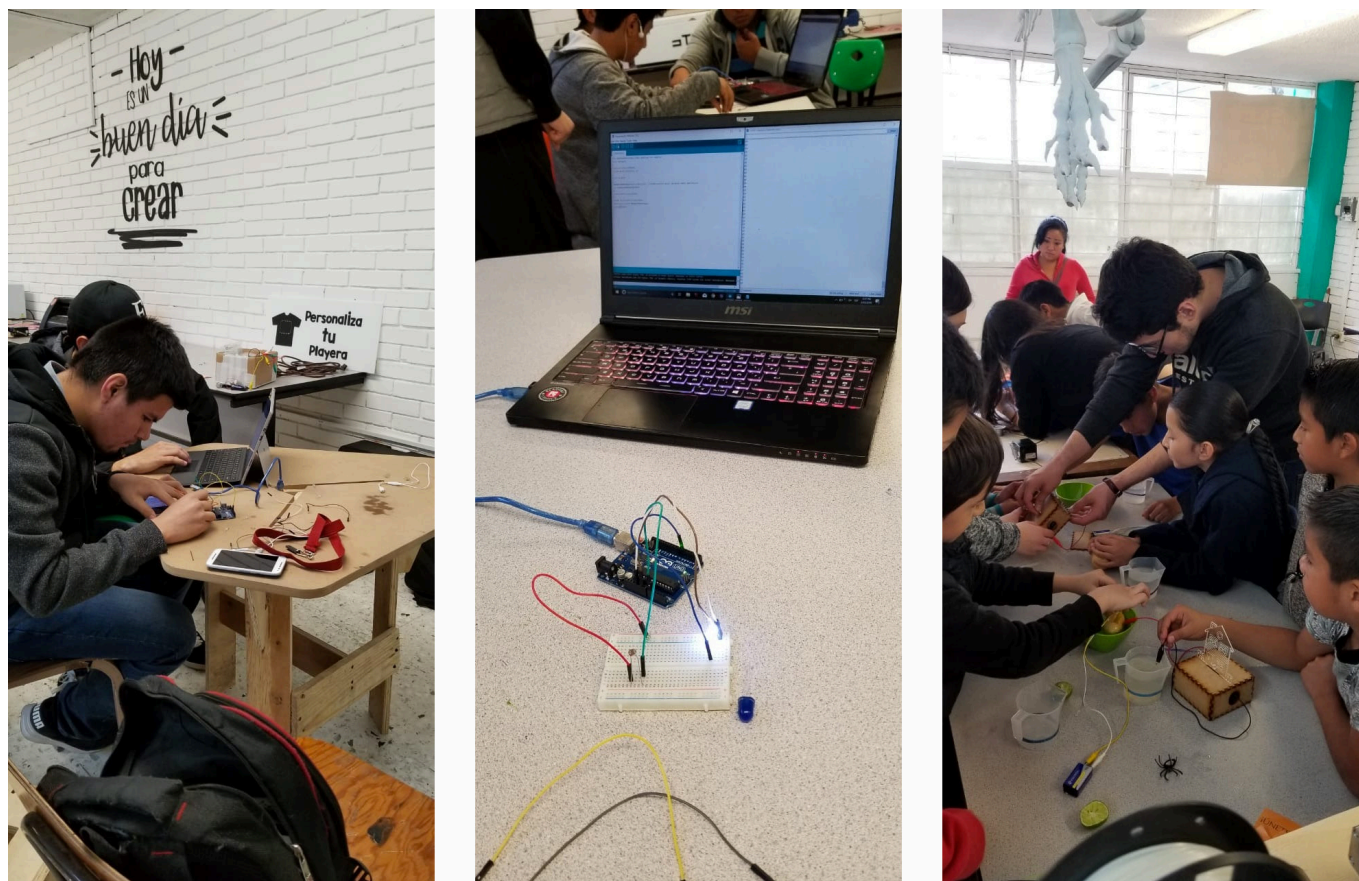


Figure 7.10: FabLab room layout and use in project-based and peer-supported learning. (Image credit: Rafa Machado)

own ideas is set in train. Beyond knowledge and skills, the confidence to follow up on ideas and implement them increases with repeated experiences of successfully completing projects such as the concrete-cast objects for the market, for example.

Glocal cultures of translation and exchange

Renate: A further question I have, Nic, is whether you needed to adapt your approaches to teaching design thinking to the respective cultural locations you found yourself in?

Nic: What I found throughout these years, is that the different aspects of design thinking practices and processes speak to different people. I feel that it is important to introduce any process (such as design thinking) or technology (digital fabrication) that may have originated in the 'global north' in a discursive/dialogic way. This requires skilful facilitation, and nimble testing of different approaches to see what is desired and what works in the local setting. A key principle is to encourage playfulness and fun to overcome perceived barriers of status, class or background. It needs to start with observing and inquiring about the community's needs and desires to get to know it, then introducing the possibilities of processes and technologies to help to achieve what they desire. When solution approaches are prototyped often new problems or challenges occur, which makes the design process messy and unpredictable, but also malleable and adaptable to any local context. Most critical is that whatever I ask the community to do, I do too. For example, I sit with participants at the table in making workshops and create my own response. This really helps with overcoming some of the barriers that are created through the spoken language. As mentioned, I am not fluent in Spanish and always needed someone to translate. However, if I was able to speak with objects in my hands and responded to others who talked about objects in their hands, translation was merged with embodied experiences and hence much easier to interpret. I do think that the embodied nature of design thinking is important in facilitating such translation processes.

Renate: If I understand you correctly, what from an art-history and cultural-studies point of view would be perceived as a need to acknowledge and negotiate cultural difference is considered much less of an issue if at all with regard to design thinking. Could you perhaps expand on how this relates to the multiple levels of

what one could call the transnational flow entailed in the project?

Nic: I understand the transnational connection with my partners as characterised by an eagerness to experiment and learn to adapt to local challenges and problematic situations in a specific place. Every problematic situation is unique and socially constructed in a place, with information, approaches, resources, software etc., not tied to a place but collectively shared by a community, often globally, and enacted through what is referred to as 'legitimate peripheral participation' in the Community of Practice (CoP) (Lave & Wenger, 1991; Wenger, 1998). The phrase, 'legitimate peripheral participation', is quite a mouthful. Let me unpick this. Legitimation shapes the ways of belonging to a community. In the FabLab context, makers legitimately participate in the community by (digital) making, and digital making as an approach goes across nations. The concept of peripherality gives importance to a location in participation. The location of the community FabLab La Campana-Altamira, for example, and its connection to other local communities (community council, market, high school) influences what is made in the lab. Hence a CoP, such as the network of FabLabs, is transnationally connected but also localised in a physical space. In the case of the participants in the FabLab La Campana, being part of overlapping transnational CoPs, such as of design thinking, STEM education or FabLabs in my case, as well as being rooted in a locality with overlapping local communities (community council, guerrilla gardener, market, high school), helped the project to reconfigure the use of existing processes and tools (digital fabrication) to develop and implement desired change processes with members of the local community (Karasti et al, 2018). This is called infrastructuring. In infrastructuring, experiences and approaches are shared between key actors of overlapping CoPs and their networks. In the Fab community, global and regional diaspora play a vital role in infrastructuring, as they are locally, regionally and globally connected.

Architects and researchers involved in the FabLab LaCampana from Mexico, Venezuela and Columbia were connected through the Fab Academy and Barcelona FabLab. As a design researcher from the UK, I am part of design thinking and STEM education transnational CoPs that overlap and interact locally with other CoPs. So, increasingly, I also became part of another partnering CoP, that of FabLabs in Mexico and eventually also here in the UK. Interestingly, local participation and co-designing brings globally linked CoPs together.

Renate: Amy, how does this compare to the way transnational elements informed your work on *Suits and Saris*?

Amy: Transnationalism, understood here as the lived experiences of multiple migrants and their families, was certainly at the heart of the exhibition's narrative structure. But it can also be seen in the processes and contexts in which British Asian fashion has been adapted and translated across national and cultural borders. For example, during the course of the interviews with community elders and sari-shop owners, we learned about the 1970s and '80s fashion for Japanese-made, synthetic saris and the pivotal role of Leicester-based sari-shop owners in their design and popularity. This phenomenon certainly only came about because of the transnational links and multiple migrations that were legacies of the British Empire.

The Japanese sari is a great example of transnationality expressed through clothing. These fashion-forward and easy-to-care-for garments were manufactured in Japan (a leading producer of high quality synthetic materials at that time) and designed in Britain (several Leicester-based businesses led on

this) to appeal to Western-based diaspora communities (making use of fashionable motifs and trends in Western fashion). But they were then gifted to friends and families in East Africa and crucially India, where cheaper, Indian-made versions eventually became readily available. The resulting ubiquity of synthetic saris in the 1980s led to their going out of fashion; they became associated with cheapness and tackiness. In around 2011, while working on the exhibition's development, I found a couple of original Japanese-made saris in the Oxfam Shop in Leicester (stamped on the selvedge with 'Made in Japan', a looked-for mark of quality), which I donated to the museum. In turn, these became part of the exhibition, in the section *Trading Places* (Fig. 7.11), along with several examples loaned by the aunt of a curatorial team member, who also supplied period-style blouses.

Malika Kraamer and I further explored this aspect of our research in a paper published in *Textile History* in 2015 (Barnes & Kraamer) and a book chapter published in 2018 (Kraamer & Barnes). As far as we have been able to determine, our work on Japanese saris is the first to give them focused academic attention. But it's important to note that while this was



Figure 7.11: *Trading Places*, featuring Japanese-made saris. *Suits and Saris*, New Walk Museum and Art Gallery, Leicester, 2012. (Photo: Amy Jane Barnes)

a surprising story to us, as white European curators, it wasn't, of course, to the East-African Asian and South Asian communities we were working with.

Methods and approaches

Renate: I wanted to draw out some aspects of what you presented so far, also in relation to investigating what one might call the discipline-specific contours and how they are perhaps refracted as they meet in this discussion. As a first step, can we home in on the question of method that underpinned your projects? Approaches often rest on underlying assumptions within disciplinary fields and do not necessarily translate across their boundaries, and are therefore worth exploring and making explicit.

Amy: I'm not sure disciplinary boundaries apply in the context of this type of exhibition. Or, perhaps they do, and I'm too 'close' to the project to see them? In the context of museum work, I suppose one draws on a number of disciplines and ways of making meaning. I have to admit, it's not something I've reflected on before.

Renate: I can see where you are coming from, and I am of course situated somewhat differently in the field. From my vantage point, the ways of working in a museum do reflect what one might call disciplinary procedures and approaches in a wider sense, with (more or less) established ways of doing things which are not static of course. Community engagement constitutes one such element, curation and issues of representation another. Then, information texts and object labels of all sorts need to be written and how these tasks are approached often rest on unspoken agreements, with history as spectral presence. To my mind, there are professional processes or methods specific to museums, which are rightly being challenged at the moment, for example by the Black Lives Matter (BLM) movement as you mentioned.

And, yes, the museum sector does generate research, but I presume while there might be an overlap with the kind of work I might be doing, its trajectory may well differ because of the way museum practice is situated. The same could be said with regard to how visual objects are employed in processes of making meaning.

Switching gear somewhat and taking the question of method a bit wider, I wanted to think about what may have emerged in our discussion in terms of confluences and abutments between our fields. What comes to mind is that the demands imposed on a museum through public funding and the need to engage local communities in ways that are seen to be representative

and rehearse notions of cultural authenticity do not apply to Nic's project, and this difference in context naturally has a significant impact on the methods and approaches and, therefore, the project outcomes. A more interesting point to make, perhaps, is that just as in Nic's project you are creating something concrete that is visual, so one could reflect on the role of the curator as creator of a visual object of sorts when looking at it through the lens of Nic's project.

Community engagement is another point of reference where our worlds overlap and where one might therefore explore differences in approach that could prove inspiring for the other discipline. Amy has given us quite a detailed account of the kinds of community engagement her project entailed and the incongruences community participation brought to light. Could you perhaps give us some more context about how participation plays out in design processes as a further and perhaps comparative point of reference?

Nic: Co-design, also called 'participatory design', starts with the premise that every participant offers expertise, whether that is disciplinary expertise or through lived experiences. Participants from different backgrounds who have an interest or stake in the project are actively involved in creating changes together. It might be important to note that design in its premise intends to change 'current situations into preferred situations' (Simon, 1996). Change is envisaged as a process that leads to improving an unsatisfactory situation. In participatory design, multiple stakeholders are asked to negotiate what this 'preferred situation' might be. And clearly, different actors will have different views on what they prefer. As discussed above, I believe it is of utmost importance that the change process through design proceeds via visual and tactile representations of preferred situations or the designing of objects, services and systems that lead to 'preferred situations'. Latin America has a strong tradition of participatory design for social change. Alejandro Barranquero, with reference to Paulo Freire's (1970) ground-breaking work in dialogic engagement, describes the Latin American origins of participatory design as '*participative communication*; that is, grassroots projects oriented to articulate means for the visualizing and the representation of communities traditionally submerged in the *culture of silence*' (2011, p. 159, italics in original).

One of the most important aspects in designing with communities is that the problems and ideas the participants come up with are visually and or physically represented. A visual or tactile representation of an idea facilitates thinking, collaboration and

communication between stakeholders and to the wider world. It also allows storing ideas for later use. For example, in the first workshop, participants worked in multidisciplinary teams with a focus on one aspect of marginalisation. A team who worked on the problem of socio-economic empowerment of the La Campana-Altamira community in Monterrey has visually represented their idea of a Community Fablab space with a blue bucket on stilts, symbolising a bell-tower (Fig. 7.12). La Campana means 'the bell' in English, and the team created a prototype of a bell-shaped tower that could be designed to house the FabLab and makerspace in the community.

This shared representation of an idea is known as 'boundary object'. Susan Leigh Star and James R. Griesemer proposed the boundary objects theory in 1989. Boundary objects may have 'different meanings

in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation' (p.393). The bell-tower boundary object introduced a coherence across 'intersecting social worlds' (1989, *passim*), those of different expertise. The bell-tower team was composed of residents and social workers from La Campana, as well as students and academics from the university Tecnológico de Monterrey. The bell-tower team's disciplinary expertise covered engineering, education and social work. Representing the team's ideas in one object focused the team and made the idea communicable. This shared representation has then helped to bid for further funding to support the implementation of the idea.

Representing ideas visually and tangibly is a key foundational principle to any design process and



Figure 7.12: Prototype of bell tower, FabLab La Campana, 2018. (Photo: Nicole Lotz)

in any field of design. In co-design, the meaning of this representation is a shared construction by all participants and creators. Co-design processes, and the shared visual and tangible representations that they produce, are particularly important to discuss when we talk about the 'global'. With different languages, disciplines, world views and experiences involved in a project, tangible and visual forms of communication offer a platform of engagement that is more inclusive and opens doors for other participants and partners to join. The visual or tactile representation of ideas allows others to critique the proposals and suggest improvements and new activities. Teams, who work on similar topics or tasks have the opportunity to learn from and with each other. What struck me as special in the Mexican context, was the high level of crafts and making skills with which the ideas were brought to life. Continuing engagement and bringing in different expertise and skills (disciplinary and lived) as needed is important to bring about change.

Returning to the example of the bell-tower community FabLab, the team criticised the invisibility of the La Campana-Altamira community, their socio-economic needs and problems, which denies them the opportunities to learn and change. In their proposal, a FabLab and makerspace for the community were seen as a catalyst for change in which a larger part of the community can be actively involved. The bell tower was envisaged as a landmark building, as a symbol for collective changemaking. Although the bell-tower FabLab building itself was probably never envisaged to be realised, the theme of visibility of the La Campana-Altamira neighbourhood was taken up by the concrete cast market benches and murals that replaced the trash container (see Fig. 7.9).

Concluding thoughts

Renate: We engaged in this discussion to communicate beyond our disciplinary fields to get a sense of the differences of how we practice in relation to what one might refer to, in the widest sense, as the global. We make no claim here of course that the case studies around which the discussion revolves are wholly representative of how we work in our respective fields, yet preoccupations and ways of doing certainly have become evident I think, as well as moments of miscomprehension that needed to be bridged.

What has also transpired for me is the extent to which in art history the medium of engagement is more text-based, and that certain burdens, such as the one of representation, which is prevalent in a

museum context, are not felt as acutely in design. I also confess to a degree of co-creation envy when listening to Nic and the fact that she is seemingly free to run with whatever ideas workshop participants come up with, or this is certainly how it seems, especially when compared to the restriction of working in a museum environment and the many difficult balances that need to be struck in this context.

Lastly, I would like to invite you to reflect on the process these conversations entailed. What have been moments of surprise and interest, noted differences of working as well as similarities perhaps that were difficult or easy to relate to? And what might be take-aways for you from this conversation?

Amy: On the surface, these are two very different projects, working in different contexts and with different aims. It isn't particularly easy to compare them or find similarities. I was a researcher based in Leicester, working at a Leicester museum, researching Leicester-based communities, and curating an exhibition aimed at an audience largely comprising Leicester residents. Whereas Nic's project was complicated by different geographies, languages and expectations and assumptions. Had we developed the exhibition with a view to it being hosted in or travelling to Nairobi, for instance, we would undoubtedly have produced a different end-product mindful of a wider audience. And then, there may have been more similarities and congruences with the process of making the FabLab project. That said, both projects offer approaches to achieving similar ends: community participation and engagement.

Nic: It was revealing to discover similarities to the challenges to community engagement in both Amy's work in Leicester and my work in Monterrey. Community engagement can never be representative, you will never be able to involve everyone who might be affected by your work. And this is important to recognise and to challenge your methods of engagement. I was taken by Amy's admittance of problems in reaching younger community members with an exhibition of a certain generation's designs' and in my case, reaching older adult generations of La Campana-Altamira with the use of innovative digital fabrication technology in community design interventions.

I think we both observed a global flow of ideas and localised implementations, for example in the Japanese saris or community maker-carts, that carries and translates across contexts. The importance of transnational participants and overlapping communities

of practice that help to translate ideas into a local participatory project cannot be underestimated.

A challenge was stepping out of the neat narratives we create when we describe our own projects and when we tried to respond to each other's work and Renate's and Kim's commentary and questions. From time to time, I felt lost, or couldn't see where the discussion would lead us. The criticality with which a finished project can be discussed (because you had time and space to reflect) is much more difficult to achieve when you talk about a live project. I think this is symptomatic of design practice, but increasingly also in research practice, in that you engage in a project that might create unexpected impact, but have little time to contemplate what mistakes you may have made and how these could be addressed or avoided in a similar project. This conversation offered me a welcome 'step back' and space for reflection on this work in progress. For example, the assumptions we make about what symbolises heritage of a community (a particular fabric or garment) or what symbolises progress and positive change in a marginalised community (digital fabrication) needs to be challenged, not that it is a completely false interpretation, but that it might not be representative of an entire community.

Amy: This is a great point. You've had the opportunity here to reflect on an ongoing process, and these discussions can go on to inform future iterations of the FabLab project. In contrast, I began working on *Suits and Saris* a decade ago. The exhibition closed in 2012 and Malika and I published our last article based on the project in 2018. It's not something I'm likely to return to now, aside from this conversation.

The experience of making *Suits and Saris* was not always a happy one and while I am immensely proud of the resulting exhibition, I remember the two years I worked on the project with some ambivalence. The fact that the 'legacy' website was taken down by the City Council not long after the exhibition closed, is emblematic, I think, of an institutional apathy for the innovative work we were trying to do with regards to exposing and deconstructing the effects of the museum on collections and their interpretations.¹ On reflection, this is, perhaps, not so surprising! However, good things did come out of the project, not least a collection of oral histories; the audio recordings and transcripts of the interviews we conducted during the research

¹ While the *Suits and Saris* pages have long since disappeared from the Leicester Museums website, an accompanying magazine developed by youth curators is still available online (S&S, s.l.a.n.). The articles feature images of the exhibition and reflect upon some of its themes.

phase, which have been lodged with the East Midlands Oral History Archive (EMOHA) at the University of Leicester. As a result, the resources available to researchers of the East-African Asian community in Leicester are now so much richer.

Renate: Thank you very much Amy, Nic and Kim for engaging in this process which often was quite involved as it proved to be quite a challenge at times to articulate contexts clearly and to ask the kind of questions that would draw them out. From my point of view, statements often pre-supposed a familiarity with a given way of working that turned out to be just that, assumptions that needed further unpacking and explanation, soon to be followed by a further need to offer more context. I also noted that it was only after quite a number of exchanges that a more generative discussion emerged which allowed for drawing out facets of the projects that spoke to one another.

I liken the process to the new connections that can be made through a rehang in a gallery, when images which were, for example, presented in a chronological context, are combined according to a theme, or according to some other principle. For me, seeing familiar images in a different context always allows for aspects to become visible that were not apparent before, opening up new perspectives and making new meanings available. I hope this cross-disciplinary conversation will likewise generate some new insights and perspectives.

But I would like to leave the concluding comments to Kim, who may have further thoughts on the territory that has been covered, and can perhaps also draw out some elements that were not explicitly addressed but are integral to this conversation.

Kim: It seems to me that this dialogue has addressed questions that are nested within one another. On one level, we have discussed differences between design and art history, or museum studies as disciplines. On another level, comparison between the two projects demonstrates something about how these disciplines address the legacies of colonialism and the relationship between the local and the global. Thirdly, there is a discussion of methods of community engagement, which are quite different in each of the two projects, though their purposes are comparable.

When following the discussion, I found it useful to reflect on points of similarity and difference between the two projects. Both involve design, though in quite different ways. In *Suits and Saris*, the emphasis falls on the consumption of designed objects – textiles and clothing – which operate within a tradition of

dress to signify cultural identities. The relationship between consumption and identity certainly is a central preoccupation in cultural-studies approaches to design, and I would say that Amy's reflection helpfully points to some challenges involved in discussion of 'identities' in such contexts. There is the risk of imposing implicitly colonial assumptions, or of homogenising a diverse community, as Amy explained. There is also the problem that clothing is so implicated in the lived performance and negotiation of identity that it rarely provides stable meanings. It is difficult to avoid stabilising the meaning of fashion when we display articles of clothing in a museum; in actuality, the objects and their meanings are in circulation and subject to countless modifications and contestations. The same may be said for other categories of designed objects, though with the caveat that design operates with such diverse materials and in such a variety of contexts that it is difficult to generalise.

Whereas *Suits and Saris* might be framed as a study of the consumption of design (though it obviously has more to it than such a crude précis suggests) the central focus of the Monterrey project is the design process, which is introduced into a specific social context through the FabLab and through 'design-thinking' techniques. Here community is envisaged as an interaction with urban space and design as a means of facilitating civic identity. The project also seems to participate in a reinvented and updated discourse of the 'maker', which has flourished over the last decade. It's quite a diverse movement, which is promoted with large claims about a new potential for localised production as I have already mentioned. The maker movement is also sometimes discussed as a means of countering the 'deskilling' which is a damaging side-effect of technological development (Sennett, 2009). This represents something of a return to venerable themes in design reform and design education, linked to the enormous influence of John Ruskin and William Morris and the pedagogy of the Bauhaus. It was interesting to explore, in this context, how digital skills and other making skills interacted.

Despite the differences between the two projects, both have a strong emphasis on the promotion of community and civic identity. *Suits and Saris* emphasises the role that designed objects have in representation and recognition of a community, whereas Nic's project emphasises intervention in urban space and analysis of space as a factor in civic cohesion. The pedagogic concerns shared by both projects seem to be linked to questions of community, too. Learning came up a few times in Amy's discussion in relation to heritage, though this is very tricky terrain as she described very

clearly. The pedagogic dimension of Nic's project is straightforward, in the sense that the FabLab is located in a school, but it also has the ambition to inculcate certain kinds of values and behaviours through opportunities to learn technical skills. This is how I understand the emphasis on entrepreneurialism in the Monterrey project, for example.

In a recent book on what they term 'undesign', Gretchen Coombs, Andrew McNamara and Gavin Sade make an interesting observation about the design-art relationship, in that it 'usually results in dichotomous formulations in which one side or the other is judged to be the bad relation because it lacks something that the other possesses' (2019, p.3). This rings true to me from my experience of working in art-and-design education and of witnessing occasional border disputes between representatives of these disciplines. Two important points of reflection relevant to this point emerge through this roundtable: first, a sense of the disciplinary complexity that exists between art and design. There are not two disciplines but many: alongside fine art and design (which is itself sub-divided in complex ways), we should include art history, museum studies and so on. Second, despite the translation problems that exist between disciplinary languages, there remain fundamental areas of shared concern which allow for productive communication. The problems that arise at the intersection of pedagogy and civic responsibility seem to be related in Amy's and Nic's projects, for example. Given that the history of design is so bound up with questions of pedagogy, this seems an interesting point of contact, where the standpoints taken by design and art history might examine issues that continue to be relevant.

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